

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

Remarks

The Office Action dated May 27, 2003 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1, 4-13, 16-24, and 27-41 are pending in this application. Claims 1, 4-8, 11-13, 16-18, 21, 23, 24, 27, 28, 31, and 33 stand rejected. Claims 9, 10, 19, 20, 22, 29, 30, 32, and 34-41 are withdrawn from consideration.

Submitted herewith is a Submission Of Marked Up Claims in accordance with 37 C.F.R. § 1.121(c)(1)(ii).

The restriction of newly Claims 34-41 is respectfully traversed.

Applicants submit that in a response to a species election requirement in the Office Action dated August 5, 2002 that Applicants filed on August 30, 2002, Applicants elected with traverse Species A shown in Figures 1-4 for examination. Applicants respectfully submit that newly added Claims 34-41 are readable upon elected Species A. Accordingly, Applicants respectfully submit that the restriction of 34-41 is improper and that the restriction should be withdrawn.

The rejection of Claims 1, 4, 7, 8, 11-13, 16-18, 21, 23, 24, 27, 28, 31, and 33 under 35 U.S.C. § 102(b) as being anticipated by Gregson (US 3,393,026) is respectfully traversed.

Gregson describes rotary bearing arrangements for supporting large heavy objects such as rotatable sections of shielding in nuclear reactors. Figure 1 shows part of the roof of the shielding of a nuclear reactor having a refuelling machine mounted on the shielding. The horizontal roof of the shielded enclosure includes a large aperture that is closed by rotatable cover sections. The refuelling machine is mounted to one of the rotatable cover sections.

Claim 1 of the present application recites a reactor servicing platform for a nuclear reactor. The reactor servicing platform includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame. The frame includes a plurality of interconnected beams, and the floor includes a reactor access opening sized to permit access to the reactor pressure vessel. The reactor servicing platform further includes at least one auxiliary platform extending into the access opening. The at least one auxiliary platform is movable along a perimeter of the access opening of the floor.

Gregson does not describe nor suggest a reactor servicing platform as recited in Claim 1. Particularly, Gregson does not describe nor suggest a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Rather, Gregson describes a horizontal cover or roof of the shielded enclosure of a nuclear reactor. The Office Action, at page 4, suggests that the main rotatable cover section 14 is a reactor servicing platform and that the platform has a floor supported by a support structure 38. Applicants disagree with this suggestion because Gregson describes, at Col. 4, lines 42-45, that reference numeral 38 refers to a steel bearing plate secured to the main cover section 14. Gregson does not describe nor suggest that the steel bearing plate 38 is attached to the frame of a servicing platform as recited in Claim 1 of the present application.

Further, Applicants submit that Gregson does not describe nor suggest a frame comprised of a plurality of interconnecting beams. The Office Action, at page 4, suggests that the main cover section is a slab of concrete that steel reinforced and that this "steel-reinforcement for the platform is inherently provided by a frame of interconnected reinforcing beams". Although

Applicants agree that the main cover section described in Gregson is probably made from reinforced concrete, Applicants disagree with the suggestion that the steel-reinforcement is inherently provided by a frame of interconnected reinforcing beams. Particularly, Applicants submit that steel reinforcement in concrete is typically provided by round steel bars embedded in the concrete. Applicants submit that one skilled in the art would not equate a round steel reinforcement bar, better known as rebar, to a beam.

Still further, Applicants submit that, contrary to the suggestion at page 4 of the Office Action, the main cover section 14 is not a reactor servicing platform as recited in Claim 1. Particularly, the main cover section 14 described in Gregson is just a slab of concrete that may or may not have steel reinforcement rods embedded inside. Applicants submit that the slab has an upper surface, but that there is no teaching or suggestion in Gregson that main cover section 14 includes a floor that is attached to the top of a frame comprised of a plurality of interconnecting beams. Also, there is no teaching or suggestion in Gregson that the main cover section 14 includes a support structure attached to the frame of interconnecting beams. Rather, Gregson describes a steel bearing plate 38 secured to the bottom surface of the main cover section 14.

For the reasons set forth above, Applicants submit that Claim 1 is patentable over Gregson.

Claims 4, 7, 8 and 11-12 depend from independent Claim 1. When the recitations of dependent Claims 4, 7, 8 and 11-12 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 4, 7, 8 and 11-12 likewise are patentable over Gregson.

Claim 13 of the present application recites a nuclear reactor that includes a primary containment vessel, a reactor pressure vessel positioned in the primary containment vessel, and a reactor servicing platform. The reactor servicing platform includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame. The frame includes a plurality of interconnected beams and the floor includes a reactor access opening sized to permit access to the reactor pressure vessel, and at least one auxiliary platform extending into the access opening. The at least one auxiliary platform is movable along a perimeter of the access opening of the floor.

Gregson does not describe nor suggest a nuclear reactor as recited in Claim 13. Particularly, for the reasons set forth above, Gregson does not describe nor suggest a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Accordingly, Applicants submit that Claim 13 is patentable over Gregson.

Claims 16-18, 21, and 23 depend from independent Claim 13. When the recitations of dependent Claims 16-18, 21, and 23 are considered in combination with the recitations of Claim 13, Applicants respectfully submit that Claims 16-18, 21, and 23 likewise are patentable over Gregson.

Claim 24 of the present application recites a method of servicing a nuclear reactor during a reactor outage. The method includes positioning a servicing platform above the reactor pressure vessel and performing predetermined servicing operations. The servicing platform includes a frame, a support structure attached to the frame, and a floor attached to the frame. The frame includes a plurality of interconnected beams, and the floor includes a reactor access

opening sized to permit access to the reactor pressure vessel and at least one auxiliary platform extending into the access opening. The at least one auxiliary platform is movable along a perimeter of the access opening of the floor.

Gregson does not describe nor suggest a method of servicing a nuclear reactor as recited in Claim 24. Particularly, for the reasons set forth above, Gregson does not describe nor suggest a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Accordingly, Applicants submit that Claim 24 is patentable over Gregson.

Claims 27, 28, 31 and 33 depend from independent Claim 24. When the recitations of dependent Claims 27, 28, 31 and 33 are considered in combination with the recitations of Claim 24, Applicants respectfully submit that Claims 27, 28, 31 and 33 likewise are patentable over Gregson.

For the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claims 1, 4, 7, 8, 11-13, 16-18, 21, 23, 24, 27, 28, 31, and 33 be withdrawn.

The rejection of Claims 1, 4, 7, 8, 11-13, 16-18, 21, 23, 24, 27, 28, 31, and 33 under 35 U.S.C. § 103(a) as being unpatentable over Gregson (US 3,393,026) in view of Goto et al. (US 5,351,277) is respectfully traversed.

At least for the reasons set forth above, independent Claims 1, 13, and 24 are patentable over Gregson.

Goto et al. describe a method of constructing a top slab of a nuclear reactor container. The top slab includes interconnecting rebar 8, 9 embedded inside concrete. Goto et al. do not describe nor suggest a reactor servicing platform that includes a frame, a support structure

attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Rather, Goto et al. describe a concrete top slab that includes interconnecting rebar embedded in the concrete. As explained above, one skilled in the art would not equate interconnected rebar with interconnected beams. Further, Goto et al. do not describe nor suggest a floor attached to a top of a frame of interconnecting beams, nor a support structure attached to a frame of interconnecting beams.

Gregson and Goto et al., alone or in combination, do not describe nor suggest a reactor servicing platform as recited in Claim 1, nor a nuclear reactor as recited in Claim 13, nor a method of servicing a nuclear reactor as recited in Claim 24. Particularly, and for the reasons explained above, Gregson and Goto et al., alone or in combination, do not describe nor suggest a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Accordingly, Applicants submit that independent Claims 1, 13, and 24 are patentable over Gregson and Goto et al., alone or in combination.

Claims 4, 7, 8 and 11-12 depend from independent Claim 1, Claims 16-18, 21, and 23 depend from independent Claim 13, and Claims 27, 28, 31 and 33 depend from independent Claim 24. When the recitations of dependent Claims 4, 7, 8 and 11-12, and Claims 16-18, 21, and 23, and Claims 27, 28, 31 and 33 are considered in combination with the recitations of Claims 1, 13, and 24 respectively, Applicants respectfully submit that Claims 4, 7, 8, 11-12, 16-18, 21, 23, 27, 28, 31, and 33 likewise are patentable over Gregson and Goto et al., alone or in combination.

For the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 1, 4, 7, 8, 11-13, 16-18, 21, 23, 24, 27, 28, 31, and 33 be withdrawn.

The rejection of Claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Gregson alone or Gregson in view of Goto et al. is respectfully traversed.

At least for the reasons set forth above, independent Claim 1 is patentable over Gregson and Goto et al., alone or in combination.

Claims 5 and 6 depend from independent Claim 1. When the recitations of dependent Claims 5 and 6 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 5 and 6 likewise are patentable over Gregson and Goto et al., alone or in combination.

For the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 5 and 6 be withdrawn.

The rejection of Claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Gregson alone or Gregson in view of Goto et al. and further in view of OSHA regulations is respectfully traversed.

At least for the reasons set forth above, independent Claim 1 is patentable over Gregson and Goto et al., alone or in combination.

The OSHA regulations are cited for teaching a safety rail around a perimeter of an access opening. The OSHA regulations is not cited for, and does not teach, a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams.



Gregson, Goto et al., and the OSHA regulations, alone or in combination, do not describe nor suggest a reactor servicing platform as recited in Claim 1. Particularly, and for the reasons explained above, Gregson, Goto et al., and the OSHA regulations, alone or in combination, do not describe nor suggest a reactor servicing platform that includes a frame, a support structure attached to the frame, and a floor attached to the top of the frame where the frame includes a plurality of interconnected beams. Accordingly, Applicants submit that independent Claim 1 is patentable over Gregson, Goto et al., and the OSHA regulations, alone or in combination.

Claims 5 and 6 depend from independent Claim 1. When the recitations of dependent Claims 5 and 6 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 5 and 6 likewise are patentable over Gregson, Goto et al., and the OSHA regulations, alone or in combination.

For the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 5 and 6 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,



---

Michael Tersillo  
Registration No. 42,180  
ARMSTRONG TEASDALE LLP  
One Metropolitan Square, Suite 2600  
St. Louis, Missouri 63102-2740  
(314) 621-5070



24-NS-120748  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Colditz et al. :  
Serial No.: 09/683,823 : Art Unit: 3641  
Filed: February 20, 2002 : Examiner: R. Palabrica  
For: REACTOR SERVICING PLATFORM :

**SUBMISSION OF MARKED UP CLAIMS**

Commissioner for Patents  
P.O. Box 1450  
Arlington, VA 22313

A marked-up version of amended Claims 1, 13, and 24, in accordance with 37 C.F.R. § 1.121(c)(1)(ii), follows below.

MARKED UP CLAIMS

1. (thrice amended) A reactor servicing platform for a nuclear reactor, the nuclear reactor comprising a reactor pressure vessel positioned in a primary containment and at least one refuel bridge, the primary containment comprising a refueling floor, said servicing platform comprising:

a frame comprising a plurality of interconnected beams;

a support structure attached to said frame;

a floor attached to [and covering] a top of said frame, said floor comprising a reactor access opening sized to permit access to the reactor pressure vessel; and

at least one auxiliary platform extending into said access opening, said at least one auxiliary platform movable along a perimeter of said access opening of said floor.

13. (thrice amended) A nuclear reactor comprising:

a primary containment vessel;  
a reactor pressure vessel positioned in said primary containment vessel; and  
a reactor servicing platform comprising:  
a frame comprising a plurality of interconnected beams;  
a support structure attached to said frame;  
a floor attached to [and covering] a top of said frame, said floor comprising a reactor access opening sized to permit access to said reactor pressure vessel; and  
at least one auxiliary platform extending into said access opening, said at least one auxiliary platform movable along a perimeter of said access opening of said floor.

24. (thrice amended) A method of servicing a nuclear reactor during a reactor outage, the reactor comprising a primary containment vessel and a reactor pressure vessel positioned in the primary containment vessel, said method comprising:

positioning a servicing platform above the reactor pressure vessel, the servicing platform comprising a frame comprising a plurality of interconnected beams, a support structure attached to the frame, a floor attached to a top of the frame, the floor comprising a reactor access opening sized to permit access to the reactor pressure vessel, and at least one auxiliary platform extending into the access opening, the at least one auxiliary platform movable along a perimeter of the access opening of the floor; and

performing predetermined servicing operations on the reactor.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael Tersillo", written over a horizontal line.

Michael Tersillo

Registration No. 42,180

ARMSTRONG TEASDALE LLP

One Metropolitan Square, Suite 2600

St. Louis, Missouri 63102-2740

(314) 621-5070